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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,265	02/09/2004	Julius J. Stevens	001807-3	8577
22204	7590	08/06/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			MULLINS, BURTON S	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/773,265

Applicant(s)

STEVENS ET AL.

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claim 11 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (Group II), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 08 July 2004.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 09 February 2004 has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai et al. (US 4,628,891). Asai teaches a permanent magnet alternator comprising: a stator including a stator body 20 and a plurality of spaced stator poles (not numbered; Fig.12) projecting inwardly from said stator body; a winding circuit 9 wound through the spaces between said plurality of stator poles, a rotor assembly 1 mounted for rotation within said stator body (Fig.1), said rotor assembly including a rotor body (iron cup) 2; a plurality of permanent magnets 3 fixedly mounted on an outer circumferential surface of said rotor body 2 in

Art Unit: 2834

alternating polarity (Fig.2); and retaining means (cup-like, magnet protection cover) 4 for reducing the effects of centrifugal motion of said rotor body during operation of said alternator (Figs.1&7), said retaining means 4 being positioned between said plurality of permanent magnets 3 and said stator poles (Figs.1&7).

Regarding claim 2, the retaining means, as seen in Figs.1&7, comprises a cylindrical sleeve.

Regarding claims 3-4, the magnet protection cover 4 comprises non-magnetic material such as stainless steel (c.3, lines 18-23).

Regarding claims 7-8, note the embodiment comprising three-phase coils 20b for the winding circuit (c.7, lines 46-57; Fig.13).

Regarding claim 9, note the embodiment of Fig.14 showing first and second rotor bodies 2 and 31.

5. Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura (US 6,144,130). Kawamura teaches a permanent magnet generator comprising: a stator including a stator body 56 and a plurality of spaced stator poles (not numbered; Fig.8) projecting inwardly from said stator body; a winding circuit 57 wound through the spaces between said plurality of stator poles (Figs.7&8), a rotor assembly 55 mounted for rotation within said stator body (Figs.7&8), said rotor assembly including a rotor body 59; a plurality of permanent magnets 53 fixedly mounted on an outer circumferential surface of said rotor body 59 in alternating polarity (Fig.8, c.20, lines 5-6); and retaining means (reinforcement member) 54 for reducing the effects of centrifugal motion of said rotor body during operation

Art Unit: 2834

of said alternator (c.13, lines 57-64), said retaining means 54 being positioned between said plurality of permanent magnets 53 and said stator poles (Figs.7&8).

Regarding claims 2-4, the reinforcement member 54 comprises cylindrical sleeve made of non-magnetic material such as stainless steel (c.14, line 16).

Regarding claims 5-6, the rotor body comprises a non-ferromagnetic material or cylindrical porous member 58 and an outer circumferential member 59 comprising laminated ferromagnetic material of silicon steel (c.13, line 66-c.14, line 3). The porous member comprises aluminum (c.5, lines 26-29).

Regarding claim 9, the rotor body porous member 58 and outer circumferential member 59 comprise first and second rotor bodies.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Asai or Kawamura, further in view of West (US 4,797,602). Neither Asai nor Kawamura teach plural fan-like projections on the rotor body.

West teaches a permanent magnet alternator including a rotor body 23 and a plurality of fan-like projections 25 spaced equidistant along said rotor body (Fig.1); wherein each of said

Art Unit: 2834

fan-like projections 25 project outwardly from said rotor body along a plane lying substantially parallel relative to an outer surface of said rotor body so as to reduce the ambient temperature within said alternator during rotation of said rotor body by drawing air into the machine through apertures (c.4, lines 45-56).

It would have been obvious to modify Asai or Kawamura and provide fan-like projections on the rotor body per West since this would have been desirable to draw cooling air into the alternator to cool the machine during operation.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029.

The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
04 August 2004